The Mid-Pacific Region doesn't operate in a vacuum. Daily, the Region's employees work with stakeholders representing the public and private sectors in virtually every water-related issue in our vast territory. We form partnerships and make accords with stakeholders to gain high levels of cooperation and achieve results not possible by the action of one agency alone. Following are examples of partnerships and accords formed during 2002.



Alcatraz Island

Alcatraz Water Reuse and Recycling

Reclamation is working cooperatively with the National Park Service (NPS) under the Sustainable Water Resources Partnership Initiative. This is a cooperative program that involves sharing expertise and capabilities of Department of the Interior agencies. The program focuses on pursuing sustainable water and energy practices at facilities on Federal lands. Reclamation and the NPS identified Alcatraz Island as an ideal location to pursue the application of sustainable technologies in remote island locations. All work performed by Reclamation has been funded by the Science and Technology Program and General Planning Activities.

The problem needing improvement at Alcatraz Island is the limited basic infrastructure development of fresh and wastewater systems. Both potable and non-potable water is barged

over from San Francisco. Sewage from the limited restroom facilities is barged back to San Francisco. Buildings on Alcatraz do not have heat, which increases the rate of decay. The lack of fresh water supply limits the ability to clean and maintain historic structures and walkways, which are subject to near-0constant sea-spray.

In 2002, Reclamation and NPS held a planning-level design workshop. For this workshop, technical staff from Reclamation, NPS, the Environmental Protection Agency, the State Water Resources Control Board, and representatives from local government and academia were brought together to brainstorm possible solutions. Reclamation took the results of this workshop and initiated a Facility Improvement Memo. Reclamation completed an Interim Progress Report in 2002 and intends to complete the Facility Improvement Memo in 2003.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Auburn Project Lands/Auburn State Recreation Area - Fire Management Plan Strategy

Reclamation is responsible for managing lands within the Auburn Dam and Reservoir Project (Auburn Project Lands) which was originally authorized by Congress in 1965. Reclamation has management authority for approximately 26,000 acres within the American River watershed.

Much of this area runs adjacent to the communities of Auburn and Foresthill, along with other residential developments. The oak-chaparral environment within this area can be highly combustible under certain dry conditions, and the risk of wildland fires is a major concern as residential and recreational activity continues to increase.

Because of these concerns, through management agreements with the California Departments of Forestry and Fire Protection and State Parks and Recreation, Reclamation is developing a Comprehensive Fire Management Plan (Plan) for the Auburn Project Lands/Auburn State Recreation Area.



Dry oak-chaparral environment is the focus of the Fire Management Plan Strategy.

The three partners initiated the fire planning process for the Auburn Project Lands in Summer 2000; however, with the advent of a dry year in 2001 and the resulting high fire danger, concerns of local leadership reached high levels. In response, the three partners moved quickly to identify and implement appropriate actions focusing on Auburn Project Lands that interface with private property where certain priority conditions may exist.

A priority condition of great concern is the residential density associated with these interface lands, such as the canyon rim adjoining the City of Auburn. It has been in response to this concern that the three partners have focused on the Fuels Management Element of the Plan for those interface lands.

The proposed Fuels Management Action Plan that has been completed is not only responsive to fire management concerns of the local interface areas but is also consistent with the broader goals and objectives of a comprehensive fire management plan for the Auburn Project Lands/Auburn State Recreation Area, which is to work to preserve the area's natural and cultural resources.

A major component for implementation is the selection of appropriate demonstration projects. Two of the demonstration projects are completed along high-priority interface lands. Local fire departments and several local private citizen groups are continuing to work as project partners as the shaded fuel break project continues.

For additional information, contact the Central California Area Office at 916-988-1707 (TDD 916-989-7285).

A priority condition of great concern is the residential density associated with these interface lands.



Battle Creek

Battle Creek Salmon and Steelhead Restoration Project

The Battle Creek Salmon and Steelhead Restoration Project (Project), through a partnership of the public and private sectors, provides an opportunity to reestablish up to 42 miles of prime salmon and steelhead habitat on northern California's Battle Creek and an additional 6 miles of its tributaries.

In this proposed Project, a formal framework between Reclamation, Pacific Gas & Electric Company (PG&E), the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game allows restoration of this unique habitat without adversarial regulatory relationships between the public and private sectors. The framework establishes a plan to modify PG&E's existing Battle Creek Hydroelectric Project (Federal Energy Regulatory Commission (FERC) Project 1121) so that restoration can occur while maintaining the economic viability of the hydro project.

The Project includes cooperative design efforts between Reclamation and the California Department of Water Resources and agreements with the California State Water Resources Control Board and FERC for the completion of environmental compliance and hydropower licensing activities. The

Project's final design and environmental compliance actions were completed, and it entered the construction phase beginning in late 2002.

For additional information, contact the Division of Design and Construction at 916-978-5302 (TDD 916-978-5608).

Riparian habitat along a Northern California stream.

California Riparian Habitat Joint Venture

Reclamation participates on the Management Board and Technical Committee of the Riparian Habitat Joint Venture, a multi-agency/organizational partnership to protect, enhance, and restore riparian habitat in California.

Partners in Flight (an international initiative to conserve neo-tropical migratory birds) has identified riparian habitat as being the most limited and important habitat in California. In 2002, the Mid-Pacific Region, along with numerous partners, provided funds for a Coordinator position to facilitate this effort; participated in riparian habitat protection, enhancement, and restoration projects; and assisted in the publication of a Riparian Bird Conservation Plan.

For additional information, contact the Division of Environmental Affairs at 916-978-5037 (TDD 916-978-5608).

CALSIM II Model Development

Reclamation, in collaboration with the California State Department of Water Resources (DWR), continued to develop the California Simulation Model (CAL-SIM II). CALSIM II is a simulation of the combined Central Valley Project (CVP)

and the State Water Project (SWP) water delivery systems and is designed for use in planning studies.

In 2002, Reclamation and DWR released two CALSIM II benchmark study models to the public. Version 1 was released in May 2002 and Version 2 was released in September 2002. These public releases serve as a common datum for modeling the CVP and SWP systems.

Reclamation and DWR also developed CALSIM II applications that address the modeling needs for the proposed facilities outlined in the CALFED Record of Decision. Both Reclamation and DWR project managers currently use these CALSIM II applications.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Central Valley Habitat Joint Venture

California's Central Valley has lost about 95 percent of its wetlands since the mid-1800s. The remaining wetlands provide critical wintering habitat for waterfowl of the Pacific Flyway. The North American Waterfowl Management Plan is an international effort among the United States, Mexico, and Canada that focuses on restoring continental waterfowl numbers to pre-1980 conditions.

Joint ventures – partnerships among Federal and State agencies, private conservation organizations, and others – have been established throughout North America in habitat areas critical to waterfowl. These joint ventures are improving habitat conditions through the acquisition, enhancement, and restoration of wetlands and habitats.

The Central Valley Habitat Joint Venture (CVHJV) is recognized as one of the most successful among the 15 North American joint ventures. The Mid-Pacific Region provides a Coordinator for the CVHJV, a highly visible and internationally recognized position that is cost-shared with the U.S. Fish and Wildlife Service.

Reclamation's support of this program, in conjunction with the Wetlands Development and Conservation Programs, San Joaquin Basin Action Plan, and San Joaquin River Riparian Restoration Program, demonstrates Reclamation's recognition of wetland values and our commitment to wetland conservation.

For additional information, contact the Division of Environmental Affairs at 916-978-5037 (TDD 916-978-5608).

Lake Tahoe Wetlands Development

Due to Reclamation's proven ability to deliver projects in an efficient and timely manner, Congress provided \$2.5 million to Reclamation in 2002 to partner with various agencies in the Tahoe Basin to accelerate attainment of thresholds of the Environmental Improvement Program.

Congressional appropriations in the amount of \$1,542,000 were provided through Reclamation to the Tahoe Resource Conservation District for the Upper



Thousands of ducks of various species use wetlands for critical wintering habitat.

Water Fact

California's
Central Valley
has lost
95 percent of its
wetlands to
agricultural and
urban
development.



Lake Tahoe

Truckee River reclamation project (\$419,000), Angora Creek stream restoration (\$910,000), implementation of residential Best Management Practices (BMP's) in the Upper Truckee River watershed (\$89,000), the Upper Truckee River Watershed coordinator (\$82,000), and monitoring previous restoration efforts on the Upper Truckee River (\$42,000). This watershed is a lead contributor of sediments and pollutants entering Lake Tahoe, and these efforts are expected to reduce sediment load in the river, thereby helping to restore clarity to Lake Tahoe.

Funding in the amount of \$700,000 was provided to the Nevada Tahoe Conservation District for implementation of the Water Quality Improvement and Stream Environment Zone Restoration Program and the Backyard Conservation Program. The Backyard Conservation Program consists

of facilitating the implementation of BMP's on private properties to reduce the amount of sediment entering Lake Tahoe.

An additional \$121,000 was provided to the Tahoe Regional Planning Agency to fund a position to evaluate and prioritize project proposals and to track progress of Tahoe Basin projects funded by Reclamation.

For additional information, contact the Division of Environmental Affairs at 916-978-5037 (TDD 916-978-5608).



A Chinook salmon

Lower Butte Creek Project

Reclamation is serving as the National Environmental Policy Act lead for an extensive fishery restoration effort in northern California's Lower Butte Creek involving the upgrade of some 31 dams, outfalls, and other structures in the Butte Sink/Butte Slough/Sutter Bypass portions of Butte Creek, one of the Sacramento Valley's premier spring-run Chinook salmon streams.

The Lower Butte Creek Project (Project) is funded by the CALFED Bay-Delta Program and led by Ducks Unlimited and the California Waterfowl Association. It began with an effort by The Nature Conservancy to explore what might be achieved voluntarily in the unajudicated

lower reaches of Butte Creek, then one of the more important spawning streams for spring-run Chinook.

Great success has already resulted from restoration efforts further upstream, leading to a tenfold increase in the sizes of the runs, and Butte Creek now has the largest run, by far, of the tributaries with pure spring-run populations.

Work is already under way in parts of the Butte Sink and the west side of the Sutter Bypass, and agreement has substantially been achieved on how to proceed on the east side of the Bypass, including integration of the restoration programs with water supply improvements for the Sutter Wildlife Refuge.

The Program is notable for its complexity, the number of collaborators, and the extensive cooperation within an area with critical flood control, fishery, wildlife, and agricultural functions.

For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

National Fish and Wildlife Foundation

Reclamation and the National Fish and Wildlife Foundation (NFWF) are working together to benefit the Nation's natural resources through the funding of projects that meet our joint desire to conserve and maintain fish, wildlife, plants, and other natural resources in the 17 western States.

Funding for these activities comes directly from Congress to Reclamation, who then works cooperatively with NFWF to mutually determine which projects will receive grants. The program's purpose is to cooperatively fund the implementation of small, localized projects that will restore or enhance wildlife habitat in the watersheds and river basins.

During 2002, a team of scientists representing each of Reclamation's five Regional Offices, the Reclamation Service Center in Denver, and the Commissioner's Office in Washington, DC, obligated \$182,000 for salmon projects (primarily in the Mid-Pacific Region), \$277,200 for control of invasive weeds, \$100,000 for general conservation, and \$395,300 for Bring Back the Natives (a habitat restoration and enhancement program). Each project is "on the ground" and benefits fish and wildlife habitat directly through conservation, restoration, and enhancement activities.

For additional information, contact the Division of Environmental Affairs at 916-978-5052 (TDD 916-978-5608).



Conserving and restoring fish and wildlife habitat like this is the National Fish and Wildlife Foundation's goal.

Red Bluff Diversion Dam Fish Passage Program

The Red Bluff Diversion Dam is a 52-foot-high concrete gated weir structure located on the Sacramento River about 2 miles southeast of Red Bluff, Califor-

nia. The dam was built between 1962 and 1964 to divert water from the Sacramento River to the Corning and Tehama-Colusa Canals, thus providing irrigation water to parts of the Sacramento Valley. Because it seasonally blocks the Sacramento River, the dam interferes with the threatened spring-run Chinook salmon and steelhead as they attempt to move upstream to their spawning grounds.

In an effort to minimize the fish passage problems, Reclamation implemented an 8-month "gates out" operation at the dam on September 15, 1994. Each year on September 15, the dam's gates are raised until May 15 of the following year. During this "gates out" period, water cannot be diverted by gravity to the Tehama-Colusa and Corning Canals.

While this change in operations has significantly mitigated the fish passage problem at the dam, it severely limits the ability of the Tehama-Colusa Canal Authority (TCCA) to reliably deliver a sufficient water supply to contract users. Reclamation and the TCCA,



Red Bluff Diversion Dam

working with other Federal, State, and local agencies and stakeholders, are co-lead agencies for the National Environmental Policy Act/California Environmental Quality Act process to develop alternative plans to increase the delivery of irrigation water during the "gates out" period.

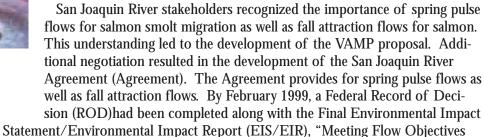
For additional information, contact the Northern California Area Office at 530-275-1554 (TDD 530-275-8991).

San Joaquin River Agreement/Vernalis Adaptive Management Program

The San Joaquin River Agreement (SJRA)/Vernalis Adaptive Management Program (VAMP) is a scientifically-based adaptive fishery management plan that is

striving to determine the relationships between water flows, export rates, and other factors on fish survival in the Sacramento River-San Joaquin River Delta.

In 1998, State and Federal fishery biologists and other stakeholders outlined the VAMP to gather the best available scientific information on the impact of flows and State Water Project/Central Valley Project (SWP/CVP) export rates on the salmon smolts in the lower San Joaquin River and to determine what impact the Head of Old River Barrier has on salmon smolt survival.



Statement/Environmental Impact Report (EIS/EIR), "Meeting Flow Objectives for the San Joaquin River Agreement, 1999-2010, Final EIS/EIR." The SWRCB adopted D-1641 on December 29, 1999, (subsequently revised on March 15, 2000) providing for implementation of the Agreement.

VAMP is implemented pursuant to the SJRA, which is a cooperative, multi-interest partnership of State and Federal agencies, various water and irrigation districts including some SWP/CVP contractors (collectively know as the San Joaquin River Group Authority [SJRGA]), and environmental parties. Pursuant to the SJRA, Reclamation and the California Department of Water Resources (DWR), via a cost sharing agreement in accordance with the Central Valley Project Improvement Act, provide an annual payment to the SJRGA. In return, the SJRGA provides up to 110,000 acre-feet of increased flow on the San Joaquin and its tributaries during a 31-day period in April-May to meet the VAMP flow targets specified by the SJRA

On December 21, 2000, a Draft Supplemental EIS/EIR was issued for the "Acquisition of Additional Water for Meeting the San Joaquin River Agreement Flow Objectives – 2001 through 2010." Reclamation and the SJRGA developed this document to identify possible environmental impacts resulting from the purchase



Survival of salmon smolts is a priority of the Vernalis Adaptive Management Program.

of up to 47,000 acre-feet of water. This supplemental water would be used to provide VAMP test flow conditions at Vernalis during 'double step years' for water years 2001 through 2010. The Final Supplemental EIS/EIR was published on March 13, 2001, and the ROD was filed November 28, 2001.

In 2002, Reclamation, in cooperation with the U.S. Fish and Wildlife Service (Service) and DWR acquired 33,430 acre-feet of water for VAMP to meet the target flows required on the Merced, Lower San Joaquin, and Stanislaus Rivers. An annual report describing all facets of the 2002 VAMP program was scheduled for release in Winter 2002-2003. The report will provide conclusions and recommendations for the technical elements and the policy/management elements of the annual VAMP monitoring. The VAMP Policy and Technical Teams will consider the recommendations identified in the annual report for incorporation into the 2003 VAMP monitoring program.

The SJRA also annually provides additional quantities of water that Reclamation has agreed to purchase for fishery protection and other project purposes. Merced Irrigation District (MEID), a member of the SJRGA, provides 12,500 acre-feet annually in the fall to augment the Merced River's instream flows for migrating anadromous fish species. Oakdale Irrigation District, also a member of the SJRGA, makes available for purchase 15,000 acre-feet plus any remaining portion of its 11,000 acre-feet maximum share of the spring pulse flow to Reclamation in New Melones Reservoir.

In the event that SJRA/VAMP is terminated for some unforeseen reason in accordance with Section 13 of the SJRA/VAMP, Reclamation negotiated with MEID, and in cooperation with the Service, California Department of Fish and Game, and DWR, a backstop measure to preserve spring and fall pulse flows on the Merced River, which accounts for slightly more than half of the VAMP flows. This measure, the Merced River Adaptive Management Program Agreement, was signed in August 2002.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608). For additional information on the VAMP monitoring program, contact the Central Valley Operations Office at 916-979-2683 (TDD 916-979-2183).

Sacramento River Diversion Feasibility Study

Public Law 106-554, Appendix D, Division B, Section 103, directs the Secretary of the Interior to conduct a feasibility study for the Sacramento River Diversion Project, consistent with the Water Forum Agreement dated April 24, 2000. The purpose of the Sacramento River Diversion Feasibility Study (Study) is to formulate viable solutions to meet the needs of the Placer/Sacramento Region and to restore fish and wildlife habitat along the Lower American River.

The Reclamation Manual Directives and Standards CMP 05-02 requires non-Federal cost sharing for feasibility studies. On June 26, 2002, a Memorandum of Understanding (MOU) was signed by Reclamation and Placer County Water Agency (PCWA) committing local sponsors to a minimum 50 percent cost-share for Study development, with a maximum total Study cost of \$10 million. PCWA also entered into cost-sharing agreements with the third-party local sponsors:

Water Fact

Of California's
71 million acre-feet
of usable surface
water:

36% - Flows into the ocean 28% - Used by agriculture 28% - Wild and Scenic Rivers, Delta outflow, wetlands 7% - Used by cities and industries 1% - Other uses

Sacramento Suburban Water District and the cities of Roseville and Sacramento.

As part of the legislation, Reclamation was also directed to support development of countywide habitat conservation efforts through Habitat Management Planning Grants. Reclamation and Placer County entered into a Financial Assistance Grant Agreement on September 19, 2002, supporting development of a countywide habitat conservation plan known as Placer Legacy. The first stage of plan development will address western Placer County, a focus area of the Study.

Significant accomplishments and activities for 2002 include:

- Cost Sharing Agreement PCWA (June 2002)
- Grant for Habitat Conservation Plan (September 2002)
- Scoping of Feasibility Study
- Technical activities
- Public involvement plan
- Plan formulation criteria
- Hydrologic and hydraulic investigations

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).



Boca Dam and Reservoir in the Truckee River Storage Project.

Truckee River Operating Agreement

Reclamation is one of a host of parties interested in the operation of reservoirs on the Truckee River (Lake Tahoe, Prosser Creek Reservoir, Boca Reservoir, Stampede Reservoir, Donner Lake, and Independence Lake) which are negotiating a comprehensive operating agreement for the reservoirs.

Parties participating in the negotiations include the states of California and Nevada, the Pyramid Lake Paiute Tribe, the Truckee Meadows Water Authority (water provider for the Reno/Sparks area), Washoe County, the Town of Fernley, and others. That agreement is called the Truckee River Operating Agreement (TROA).

The agreement will result in more efficient use of the Truckee River reservoirs and multiple benefits for a wide variety of Truckee River interests such as:

- Increased municipal and industrial drought water supply for the Reno/Sparks area and the Truckee River basin in California
- Enhanced habitat for endangered and threatened fish species in the Truckee River and Pyramid Lake
- A reduction in the variability of instream flow and enhanced seasonal instream flows
- Improved water quality and maintenance of reservoir storage at levels that better serve recreational uses.

The parties negotiating TROA have completed a draft agreement. A revised draft Environmental Impact Statement/Environmental Impact Report will be prepared by the Department of the Interior, Reclamation, U.S. Fish and Wildlife Service and State of California and is expected to be completed in 2004.

For additional information, contact the Lahontan Basin Area Office at 775-882-3436 (TDD 775-882-3436).

Water Quality Coordination

The Regional Water Quality Coordinator (RWQC) manages water quality activities relating to Water Quality Control Board permits, Endangered Species Act and Clean Water Act (CWA) actions, and the operation of the Central Valley Project. The RWQC strives to ensure minimum impact to Reclamation's operations and its ability to meet customer needs.

In FY 2002, the RWQC participated in following water quality activities:

- Represented Reclamation in the multi-agency/private stakeholder processes during several CWA activities, including:
 - Salt and Boron Total Maximum
 Daily Load (TMDL) in the Lower San Joaquin
 River at Vernalis.
 - The San Joaquin River DeepWater Ship Channel Dissolved OxygenTMDL
 - The proposed addition of Delta-Mendota Canal on Federal Clean Water Act Section 303(d) listing as impaired water body for selenium
 - National Pollutant Discharge Elimination System (NPDES) permit for Sliger Mine (an abandon mine located on Reclamation property near the Auburn Dam site)
- Warren Act Contract for Delta-Mendota Canal and Friant-Kern Canal. Represented Reclamation in multi-agency planning and scoping sessions relating to water quality issues (within or near Reclamation facilities) that may impact daily operations, including:
 - California Bay-Delta Authority (formally CALFED) Drinking Water Subcommittee
 - Freeport Regional Water Project
 - Environmental Water Account (EWA)
 - Represented the Mid-Pacific Region in the Reclamation Water Quality Work Group. The Work Group addresses various water quality issues pertinent to Reclamation facilities and operations, including:
 - Western Reservoir Assessment Program a collaboration between USGS and Reclamation



The Friant-Kern Canal is one of the areas undergoing water quality studies.

The Regional
Water Quality
Control
Coordinator
represented
Reclamation in
multi-agency
planning and
scoping sessions
relating to water
quality issues.

- Reclamation and Mid-Pacific Region Water Quality Database
- Reclamation water quality related policies

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).



Wetlands like these are protected, enhanced, and restored through the Wetlands Development Program.

Wetlands Development Program

The Regional Wetlands Development Program is a partnership based and focused on protecting, enhancing, and restoring wetlands, riparian, and associated habitats throughout the Region. The program began soon after Executive Order 11990 (no net wetland loss) required that "....each agency shall provide leadership and shall take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands."

The Central Valley in the Mid-Pacific Region has lost about 95 percent of its historical wetlands to agricultural and urban development. The Wetland Development Program – through partnerships with Federal, State, and nonprofit entities – has

successfully protected and enhanced thousands of acres of remaining wetlands and restored thousands of acres of degraded and destroyed former wetlands and associated habitats throughout the Region.

Benefits of these activities include improved habitat for resident and migratory birds, reptiles, amphibians, and mammals including several endangered species; water quality enhancement; ground-water recharge; and increased public awareness of the values of Reclamation's water resources.

In 2002, the Wetland Development Program entered into new and ongoing partnerships with some 30 entities to accomplish habitat conservation projects totaling more than 7,400 acres and educational projects such as school interpretive programs and wetland festivals.

For additional information, contact the Division of Environmental Affairs at 916-978-5037 (TDD 916-978-5608).